# Occupational dermatitis in a hairdresser

## 10-MINUTE CONSULTATION

# Occupational dermatitis in a hairdresser

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A 25 year old hairdresser complains of a rash on her hands. She thinks she might be allergic to the solutions she uses at work.

### What issues you should cover

*Defining the problem*—Up to 50% of hairdressers develop dermatitis of the hand within three years of starting work, usually either irritant contact dermatitis resulting from chemical damage or allergic contact dermatitis from a delayed (type IV) hypersensitivity reaction. Distinguishing between these is difficult but important because of a worse prognosis in the allergic form if exposure to the allergen is not eliminated.

*How is the problem affecting her?*—Her symptoms may be affecting her day to day life. She may be distressed and embarrassed and may fear for her future employment.

*Take a detailed occupational history*—Has she had skin problems before? Symptoms that develop after a new job is started or that improve when she is away from work indicate an occupational problem. Which solutions does she think might be responsible? Hair bleaches and dyes that contain ammonium and potassium persulphates or paraphenylenediamine are common triggers of allergic contact dermatitis and may also provoke respiratory problems such as asthma.

*Management strategies*—Is she using any protective measures or treatments such as gloves or over the counter creams? Ask whether she has raised the issue with her employer and, if so, with what effect. A letter from you to her employer may be helpful.

### What you should do

#### Examination

Assess her hands for signs of dermatitis. Erythematous, swollen skin indicates an acute reaction. In severe cases blistering and oozing may also occur. Dryness, fissuring, and scaling point to more chronic disease. Look for signs of supra-infection. Examine the rest of her skin, especially the forearms and face. Consider other possible skin disorders, such as urticaria and psoriasis. Typically, contact urticaria presents as acute, raised, erythematous, and itchy wheals after contact with the allergen or chemical. Psoriasis is a diverse skin disease, but in its commonest form (plaque psoriasis) the lesions are characterised by raised, inflamed red lesions covered by a silvery white scale.

#### Referral for a patch test

Explain that a patch test will help to determine the cause of her problem, and tell her what it involves. Patch testing to a hairdresser's battery—which includes hair dyes, ammonium persulphate, aminophenol, and surfactant—in addition to the standard European series is the investigation of choice; these tests are negative in irritant dermatitis. Skin prick tests or the radioallergosorbent test do not help. Arrange to see her again once you get the results.

#### Avoiding the chemicals

Explain that wearing gloves when mixing and applying chemicals can help to reduce exposure (recommend non-latex plastic gloves to minimise risk of latex allergy developing). As dermatitis is so common among hairdressers, her employer is likely to be familiar with the problem and potential responses, so she should discuss strategies for reducing exposure, such as using different products and asking colleagues to mix products or temporary redeployment to a different type of work while awaiting patch test results.

#### Treatment

Emollients are effective in keeping the skin moist and should be used regularly. Acute reactions require treatment with moderate potency topical corticosteroids (such as betamethasone valerate (Betnovate)) and, if she has signs of infection, short term use of antibiotics.

#### Information and support

Explain the potential long term nature of the condition. Discuss the need for her to be aware of exposure to solutions and the importance of continuing to use gloves and emollients. Advise her that acute flare-ups may occur with continued exposure and that if this occurs she should seek advice. Encourage learning about the condition: good practical advice on self-management is available from hairdressing organisations and occupational health websites, which she should be encouraged to pursue. She should familiarise herself with information about her rights and her employer's duties (available from the UK Health and Safety Executive.

### USEFUL RESOURCES FOR DOCTORS AND PATIENTS

Arshad SH. *Allergy: an illustrated colour text*. Edinburgh: Churchill Livingstone, 2002. pp 82-3

Bourke J, Coulson I, English J. Guidelines for care of contact dermatitis. *Br J Dermatol* 2001;145:877-85

Werfel T, Kapp A. Atopic dermatitis and allergic contact dermatitis. In: Holgate ST, Church MK, Lichtenstein LM, eds. *Allergy*. 2nd ed. London: Mosby, 2001:105-25

National Library for Health. Dermatitis—Contact. (Prodigy guidance) www.cks.library.nhs.uk/dermatitis_contact

Free factsheets on skin allergy are available from Allergy UK (www.allergyuk.org/info_factsheets.aspx)

Information for employers and employees on occupational skin disease can be accessed on the Health and Safety Executive's website (www.hse.gov.uk/skin/information.htm and www.coshh-essentials.org.uk)